

# UNITED STATES PATENT AND TRADEMARK OFFICE

ENITED STATES DEPARTMENT OF COMMERCE Enited States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1430 Alexandria, Virignia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/607,014	06/27/2003	Masami Tomita	239544US2	4930
22850 7	7590 12/21/2004		EXAM	INER
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			GOODROV	V, JOHN L
ALEXANDRIA, VA			ART UNIT	PAPER NUMBER
			1756	

DATE MAILED: 12/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		_3/7				
	Application No.	Applicant(s)				
	10/607,014	TOMITA ET AL.				
Office Action Summary	Examiner	Art Unit				
	John L Goodrow	1756				
The MAILING DATE of this communicated for Reply	ation appears on the cover sheet w	ith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNIC.  - Extensions of time may be available under the provisions of after SIX (6) MONTHS from the mailing date of this commun.  - If the period for reply specified above is less than thirty (30).  - If NO period for reply is specified above, the maximum statuf.  - Failure to reply within the set or extended period for reply will Any reply received by the Office later than three months afte earned patent term adjustment. See 37 CFR 1.704(b).	ATION.  37 CFR 1.136(a). In no event, however, may a rication. days, a reply within the statutory minimum of thir tory period will apply and will expire SIX (6) MON II, by statute, cause the application to become Al	reply be timely filed  ty (30) days will be considered timely.  NTHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed	on .	·				
	)⊠ This action is non-final.					
3) Since this application is in condition fo	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with the practice						
Disposition of Claims						
4) Claim(s) 1-26 is/are pending in the app	plication.					
4a) Of the above claim(s) is/are	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-26</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction	on and/or election requirement.					
Application Papers						
9) The specification is objected to by the I	Examiner.					
10) The drawing(s) filed on is/are: a		by the Examiner.				
Applicant may not request that any objection		•				
Replacement drawing sheet(s) including the		` ,				
11) The oath or declaration is objected to b						
Priority under 35 U.S.C. § 119						
•	afornian naioniku undan 05 U.O.O. I	C 440(a) (d) = a (D				
12)⊠ Acknowledgment is made of a claim fo	Tioreign phonty under 35 U.S.C.	3 119(a)-(d) or (f).				
a)⊠ All b)□ Some * c)□ None of:	anna anta barra barra arra barra					
1.⊠ Certified copies of the priority do						
	ocuments have been received in A	· ·				
	the priority documents have been	received in this National Stage				
application from the Internationa						
* See the attached detailed Office action to	for a list of the certified copies not	received.				
Attacher aut/a)						
Attachment(s)  1) X Notice of References Cited (PTO-892)	4)   Inton-io 6	Summary (PTO-413)				
2) ☐ Notice of Celefences Cited (F1O-692)  Notice of Draftsperson's Patent Drawing Review (PTC		s)/Mail Date				
3) 🛛 Information Disclosure Statement(s) (PTO-1449 or PT	ro/SB/08) 5) 🔲 Notice of I	nformal Patent Application (PTO-152)				
Paper No(s)/Mail Date <u>20 pages</u> .	6) 🔲 Other:	<del>_</del> ;				

Application/Control Number: 10/607,014 Page 2

Art Unit: 1756

#### DETAILED ACTION

### Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

## Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
   The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claim14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The container is not limited by what is in it. The container has no structure and is indefinite.

## Claim Rejections - 35 USC § 103

4. Claims 1-13, 15-18, 21, 23, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Emoto et al in view of EP 1 026 554. Emoto teaches a toner comprising toner particles comprising a binder resin and a colorant. The physical properties of Dv/Dn is shown [0027] and the average particle size of 3-8μm and circularity (spherical degree) note [0067]. The acid value claim 10 is shown [0059]. Emoto teaches the use of polyester as the binder for the toners but fails to teach the use of a polyester resin with a urea group. EP' 554 discloses a toner comprising a binder and a colorant. The binder resin comprises a urea-modified polyester and an unmodified polyester resin. The toner has a sphericity of .97 and is obtained by

Application/Control Number: 10/607,014

Art Unit: 1756

dissolving or dispersing the binder resin and colorant in an organic solvent to form a liquid mixture, dispersing the liquid mixture in an aqueous medium to form particles and removing the solvent from the particles. See page 16, paragraphs 0248-0249 and examples I-4 at page 17-18. This resin binder is superior in fluidity and transferability. It would be obvious to one of ordinary skill in the art with a reasonable expectation of success at the time of applicant's invention to use the improved binder for the polyester binder of Emoto in a toner used as a developer in the developing of electrostatic images to improve the physical properties of the toner.

Page 3

5. Claims 19, 20, 22, 24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomita et al in view of JP 2000-305360. Tomita et al teaches a dry toner of a size 3-10μm and a Dv/Dp of 1.05-1.25 note Col.4 lines 1-5. A wax Col.10 lines 50-55 and a modified urea polyester Col. 5 lines 1-5 along with unmodified polyester Col.8 lines 20-25 are shown to be of importance in the toner composition. Fine inorganic particles can be used as fluidizing agents note Col. 11 lines 55-69. Tomita fails to show the importance of the attenuation factor of magnetic density when used in a magnetic developing device. JP 2000-305360 teaches the importance of the attenuation factor of the magnetic density and this factor appears to be a factor with the developer and developing method such as magnetic brush development. It would be obvious to one of ordinary skill in the art at the time of applicants' invention with a reasonable expectation of success to use the pole and half pole values with the developer of Tomita in a process of developing an electrophotographic latent image to improve the quality and prevent end void and burr in a low contrast image.

## **Double Patenting**

6. Claims 1-13, 15-18, 21, 23, and 25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-29 of copending Application No. 10/729960. Although the conflicting claims are not identical, they are not patentably distinct from each other because the toner particles have the same range of physical properties.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Goodrow whose telephone number is 571-272-1384. The examiner can normally be reached on Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/607,014

Art Unit: 1756

Page 5

John L Goodrow Primary Examiner Art Unit 1756